

Some remains that become buried in sediments are actually changed to rock. Fossils that form in this way are called *petrified fossils*.



A hollow space in sediment in the shape of an organism or part of an organism is called a *mold*.



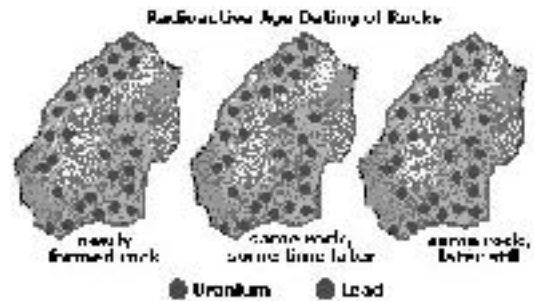
A *cast* is a copy of the shape of the organism that made the mold.



*Relative dating* can help scientists determine whether one fossil is older than another by studying where it is in layers of rock.



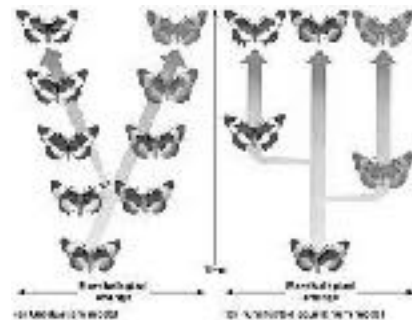
Scientists can compare the amount of radioactive elements in a sample to the amount of the element into which it breaks down. This information can be used to calculate the age of the rock, and thus the age of the fossil in a process called *radioactive dating*.



*Gradualism* proposes that evolution occurs slowly but steadily.



*Punctuated equilibria* proposes that species evolve quickly during relatively short periods.



A species is *extinct* if no members of that species are still alive.

